

# Chemistry Research Instrumentation and Facilities: Instrument Development (CRIF:ID)

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## Program Solicitation

NSF 04-534

*Replaces Document NSF 00-81*



## National Science Foundation

Directorate for Mathematical and Physical Sciences

Division of Chemistry

## Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

March 18, 2004

Fourth Tuesday in January  
in following years

## SUMMARY OF PROGRAM REQUIREMENTS

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### General Information

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#### Program Title:

Chemistry Research Instrumentation and Facilities: Instrument Development (CRIF:ID)

#### Synopsis of Program:

The Chemistry Research Instrumentation and Facilities Program (CRIF) is structured to enable the National Science Foundation's Division of Chemistry to respond to a variety of needs for infrastructure--instrumentation and facilities--that promotes basic research and education in areas traditionally supported by the Division. The NSF Guide to Programs provides detailed information on such areas (See section IX). The Instrument Development component of CRIF (CRIF:ID) provides funds for the design and construction of instruments that will enable new chemical measurements or will significantly broaden the use of chemical instrumentation.

#### Cognizant Program Officer(s):

- Joan M. Frye, Program Director, Directorate for Mathematical & Physical Sciences, Division of Chemistry, 1055 S, telephone: (703) 292-4953, fax: (703) 292-9037, email: [jfrye@nsf.gov](mailto:jfrye@nsf.gov)
- Brian M. Tissue, Program Director, Directorate for Mathematical & Physical Sciences, Division of Chemistry, 1055 S,

## Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

- 47.049 --- Mathematical and Physical Sciences

## Eligibility Information

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- **Organization Limit:**

Only non-profit research organizations or academic institutions in the US and US territories may submit proposals.

- **PI Eligibility Limit:**

An investigator may participate (as a PI, co-PI or senior personnel) in only one CRIF:ID proposal submitted to this competition each year.

The PI must be affiliated with a U.S. academic institution or non-profit research organization. Other investigators may be affiliated with U.S. academic institutions, non-profit research organizations, industry, government laboratories, or international institutions. No CRIF:ID award funds may go directly to industry, government laboratories or international institutions.

- **Limit on Number of Proposals:** None Specified.

## Award Information

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- **Anticipated Type of Award:** Standard or Continuing Grant
- **Estimated Number of Awards:** 5 to 6 - depending on the number and quality of submissions
- **Anticipated Funding Amount:** \$1,000,000 approximately, per fiscal year, pending the availability of funds

## Proposal Preparation and Submission Instructions

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### A. Proposal Preparation Instructions

- **Full Proposal Preparation Instructions:** This solicitation contains information that supplements the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full text of this solicitation for further information.

### B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is not required.
- **Indirect Cost (F&A) Limitations:** Not Applicable.
- **Other Budgetary Limitations:** Not Applicable.

### C. Due Dates

- **Full Proposal Deadline Date(s)** (due by 5 p.m. proposer's local time):  
March 18, 2004  
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## Proposal Review Information

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- **Merit Review Criteria:** National Science Board approved criteria. Additional merit review considerations apply. Please see the full text of this solicitation for further information.

## Award Administration Information

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- **Award Conditions:** Standard NSF award conditions apply.
- **Reporting Requirements:** Standard NSF reporting requirements apply.

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## I. INTRODUCTION

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The National Science Foundation (NSF) supports research that advances instrument technology and leads to the development of next-generation research and education tools. In addition, NSF strives to expand opportunities for US researchers, educators, and students at all levels to access state-of-the-art science and engineering facilities, instruments,

databases, and other infrastructure. Basic research and education in the chemical sciences depend critically on access to state-of-the-art instrumentation, from small equipment items used in individual research projects to major instruments shared and maintained for multiple researchers. Several recent reports highlight the state-of-the-art and future needs:

- Science and Engineering Infrastructure for the 21st Century: The Role of the National Science Foundation <http://www.nsf.gov/nsb/documents/2003/>
- Analytical Instrumentation for the Next Millenium (AINM) <http://www.emsl.pnl.gov/docs/ainm/>
- Prospects for Miniaturization of Mass Spectrometry <http://www.nsf-mass-spec-mini-forum.umd.edu/>

The Chemistry Research Instrumentation and Facilities Program (CRIF) is structured to enable NSF's Division of Chemistry to respond to a variety of needs for infrastructure--instrumentation and facilities--that promotes basic research and education in areas traditionally supported by the Division (see the NSF Guide to Programs for more information). The Instrument Development component of CRIF (CRIF:ID) provides funds for the design and construction of instruments that will enable new chemical measurements or will significantly broaden the use of chemical instrumentation.

## II. PROGRAM DESCRIPTION

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NSF's Division of Chemistry encourages proposals for the design and construction of instruments of importance to the chemistry community. Specifically, the CRIF:ID program supports the development of two categories of instrumentation: (1) innovative, state-of-the-art instrumentation that permits new kinds of measurements; and (2) new versions of instrumentation that substantially broaden access to measurement capabilities. Examples of instrument development in the first category might include ultrafast diffraction or spectroscopic measurements. In the second category the instrumentation might advance capabilities in real-time reaction monitoring, use of cyberinfrastructure, or chemistry education, as through the development of miniaturized and/or networked spectrometers.

In all cases, the major effort must focus on instrument development; simply combining off-the-shelf instrumentation does not constitute a significant development project. Although the focus should be on development or construction, research projects that utilize the finished product may be described in the final year of the proposal as a means of demonstrating wide potential impact. Proposals that are more suited to the CCLI, individual investigator, or CRIF:MU programs will be returned without review (see Other Programs of Interest). Investigators should contact a cognizant program officer for guidance.

Partnerships with U.S. industries are strongly encouraged to facilitate knowledge transfer, commercialization and broad utilization in the chemistry community. It is anticipated that, if appropriate, PIs will seek GOALI, SBIR or STTR support after the initial CRIF:ID award.

Support for instrument development in allied fields of research is provided through a variety of NSF programs. Specialized equipment dedicated for use in particular chemistry research projects is normally funded as part of awards to individual investigators, along with personnel and other direct project costs. Other components of CRIF include:

- **CRIF:MU** Departmental Multiuser Instrumentation - NSF 03-563; and
- **CRIF:CRF** Chemical Research Facilities - a separate program solicitation will be issued in early 2004.

## III. ELIGIBILITY INFORMATION

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Only non-profit research organizations or academic institutions in the US and US territories may submit proposals.

An investigator may participate (as a PI, co-PI or senior personnel) in only one CRIF:ID proposal submitted to this competition each year.

The PI must be affiliated with a U.S. academic institution or non-profit research organization. Other investigators may be affiliated with U.S. academic institutions, non-profit research organizations, industry, government laboratories, or international institutions. No CRIF:ID award funds may go directly to industry, government laboratories or international institutions.

#### IV. AWARD INFORMATION

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NSF anticipates up to \$1 million per fiscal year will be available for the CRIF:ID Program. Estimated program budget, number of awards and average award size are subject to the availability of funds. Five to six awards will be made as standard or continuing grants with durations of up to 3 years.

#### V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

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##### A. Proposal Preparation Instructions

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##### Full Proposal Instructions:

Proposals submitted in response to this program announcement/solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF *Grant Proposal Guide* (GPG). The complete text of the GPG is available electronically on the NSF Website at: <http://www.nsf.gov/cgi-bin/getpub?gpg>. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

The following instructions supplement the general proposal preparation instructions found in the Grant Proposal Guide:

**Cover Sheet:** An example of an appropriate title is: "Development (Construction) of a New ..... for Chemistry Research." Effective dates may be August 1 (or later) following submission of the proposal.

**Project Description:** The Introduction or Background section of the proposal must present an analysis of the need for the proposed instrumentation, including a projection of the uses and users in chemistry research. This section should detail the impact on molecular science that the new instrumentation may have. The main body of the proposal should provide:

- a detailed description of the proposed instrument;
- plans for its design and construction;
- an analysis of problems to be overcome;
- preliminary work already completed;
- a feasibility analysis;
- an estimated time schedule for completion; and
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plans for disseminating or transferring new knowledge or technology to U.S. academic, industrial or governmental laboratories or U.S. instrument manufacturers.

A brief description (2-3 pages, maximum) of research that will be carried out using the newly-developed instrument may be provided. Results from Prior Support (5 pages maximum) should also be included in this section.

**Budget:** The budget section of proposals for instrument development should indicate the total cost for construction of the equipment, apportioning estimated costs between personnel, supplies, equipment, and other costs. Requests for personnel support must include a description of the responsibilities of project co-workers and explain why a given position is necessary for the completion of the design and construction of the new instrument. Sufficient detail should be given to allow reviewers to analyze the cost of the new technology.

**Biographical Sketches:** This section should include biographical sketches (two pages each) for the Principal Investigator, co-investigator(s) and other senior personnel involved in either the development or use of the instrument. Each biographical sketch must include a list of researchers with whom the investigator has collaborated during the past four years, and the names of graduate and postdoctoral advisors. See the GPG for additional information on contents and formatting.

**Current and Pending Support:** A summary of research support from all sources must be provided for the Principal Investigator, co-investigator(s) and other senior personnel involved in either the development or use of the instrument. If an individual has no current or pending support, this should be so noted in the support statement. Disclosure is required if similar or related instrument development proposals are pending with other funding sources.

**Supplemental Information:** Itemized manufacturers' quotes for major components are required. They must be scanned into the Supplementary Documents section of the FastLane proposal and submitted electronically as part of the proposal. If applicable, RUI (Research at Undergraduate Institutions) proposals must include a RUI Impact Statement and RUI Eligibility Statement in the supplementary documents section and the proposal title should refer to RUI. A possible title might be "RUI: Development of a ..."

Proposers are reminded to identify the program announcement/solicitation number (04-534) in the program announcement/solicitation block on the proposal Cover Sheet. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

## **B. Budgetary Information**

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### **Cost Sharing:**

Cost sharing is not required in proposals submitted under this Program Solicitation.

### **Budget Preparation Instructions:**

The budget section of proposals for instrument development should indicate the total cost for construction of the equipment, apportioning estimated costs between personnel, supplies, equipment, and other costs. Requests for personnel support must include a description of the responsibilities of project co-workers and explain why a given position is necessary for the completion of the design and construction of the new instrument. Sufficient detail should be given to allow reviewers to analyze the cost of the new technology.

When justified by the reviewers' comments, the program director may recommend support at less than the requested level. If the institution feels that the recommended amount is not acceptable, it may reject the offer of an award. The program's recommendation is based on scientific judgment and optimal use of Federal funds. A recommendation for a reduced budget is not to be construed by the institution as negotiation of matching funds or cost sharing, since cost sharing is not required under this solicitation.

Multi-institutional proposals may use either the award-subaward mechanism or the linked collaborative proposal mechanism. Both of these are discussed in the GPG, Chapter II.D.3.

### C. Due Dates

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Proposals must be submitted by the following date(s):

**Full Proposal Deadline(s)** (due by 5 p.m. proposer's local time):

March 18, 2004

Fourth Tuesday in January

in following years

### D. FastLane Requirements

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Proposers are required to prepare and submit all proposals for this announcement/solicitation through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at: <http://www.fastlane.nsf.gov/a1/newstan.htm>. For FastLane user support, call the FastLane Help Desk at 1-800-673-6188 or e-mail [fastlane@nsf.gov](mailto:fastlane@nsf.gov). The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this program announcement/solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this announcement/solicitation.

*Submission of Electronically Signed Cover Sheets.* The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the [Grant Proposal Guide](#) for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Proposers are no longer required to provide a paper copy of the signed Proposal Cover Sheet to NSF. Further instructions regarding this process are available on the FastLane Website at: <http://www.fastlane.nsf.gov>

## VI. PROPOSAL REVIEW INFORMATION

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### A. NSF Proposal Review Process

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Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest, at the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority-serving institutions, or adjacent disciplines to that principally addressed in the proposal.

The National Science Board approved revised criteria for evaluating proposals at its meeting on March 28, 1997 ([NSB 97-72](#)). All NSF proposals are evaluated through use of the two merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

On July 8, 2002, the NSF Director issued [Important Notice 127](#), Implementation of new Grant Proposal Guide Requirements Related to the Broader Impacts Criterion. This Important Notice reinforces the importance of addressing both criteria in the

preparation and review of all proposals submitted to NSF. NSF continues to strengthen its internal processes to ensure that both of the merit review criteria are addressed when making funding decisions.

In an effort to increase compliance with these requirements, the January 2002 issuance of the GPG incorporated revised proposal preparation guidelines relating to the development of the Project Summary and Project Description. Chapter II of the GPG specifies that Principal Investigators (PIs) must address both merit review criteria in separate statements within the one-page Project Summary. This chapter also reiterates that broader impacts resulting from the proposed project must be addressed in the Project Description and described as an integral part of the narrative.

Effective October 1, 2002, NSF will return without review proposals that do not separately address both merit review criteria within the Project Summary. It is believed that these changes to NSF proposal preparation and processing guidelines will more clearly articulate the importance of broader impacts to NSF-funded projects.

The two National Science Board approved merit review criteria are listed below (see the [Grant Proposal Guide](#) Chapter III.A for further information). The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which he/she is qualified to make judgments.

**What is the intellectual merit of the proposed activity?**

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

**What are the broader impacts of the proposed activity?**

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

NSF staff will give careful consideration to the following in making funding decisions:

***Integration of Research and Education***

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

***Integrating Diversity into NSF Programs, Projects, and Activities***

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

**Additional Review Criteria:**

Additional review criteria for the CRIF:ID Program are:

Do the specific plans in the proposal and the prior work of the investigators indicate that the instrumentation will be successfully developed and utilized?

- Will the proposed instrumentation enable a new type of measurement or significantly broaden access to measurement capabilities?
- Are there plans to make the instrumentation designs and/or software readily available; to transfer the technology to other U.S. academic, industrial or government laboratories; or to commercialize the instrument?

In cases of comparable merit, priority will be given to requests that strengthen research activities already supported by the Division of Chemistry.

## **B. Review Protocol and Associated Customer Service Standard**

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All proposals are carefully reviewed by at least three other persons outside NSF who are experts in the particular field represented by the proposal. Proposals submitted in response to this announcement/solicitation will be reviewed by Ad Hoc and/or panel review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Director. In addition, the proposer will receive an explanation of the decision to award or decline funding.

NSF is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the date of receipt. The interval ends when the Division Director accepts the Program Officer's recommendation.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

## **VII. AWARD ADMINISTRATION INFORMATION**

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### **A. Notification of the Award**

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Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See section VI.A. for additional information on the review process.)

### **B. Award Conditions**

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An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (NSF-GC-1); \* or Federal Demonstration Partnership (FDP) Terms and Conditions \* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreement awards also are administered in accordance with NSF Cooperative Agreement Terms and Conditions (CA-1). Electronic mail notification is the preferred way to transmit NSF awards to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

\*These documents may be accessed electronically on NSF's Website at [http://www.nsf.gov/home/grants/grants\\_gac.htm](http://www.nsf.gov/home/grants/grants_gac.htm). Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant Policy Manual* (GPM) Chapter II, available electronically on the NSF Website at <http://www.nsf.gov/cgi-bin/getpub?gpm>. The GPM is also for sale through the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402. The telephone number at GPO for subscription information is (202) 512-1800. The GPM may be ordered through the GPO Website at <http://www.gpo.gov>.

### C. Reporting Requirements

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For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after the expiration of an award, the PI also is required to submit a final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for the PI and all Co-PIs. PIs should examine the formats of the required reports in advance to assure availability of required data.

PIs are required to use NSF's electronic project reporting system, available through FastLane, for preparation and submission of annual and final project reports. This system permits electronic submission and updating of project reports, including information on project participants (individual and organizational), activities and findings, publications, and other specific products and contributions. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system.

### VIII. CONTACTS FOR ADDITIONAL INFORMATION

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General inquiries regarding this program should be made to:

- Joan M. Frye, Program Director, Directorate for Mathematical & Physical Sciences, Division of Chemistry, 1055 S, telephone: (703) 292-4953, fax: (703) 292-9037, email: [jfrye@nsf.gov](mailto:jfrye@nsf.gov)
- Brian M. Tissue, Program Director, Directorate for Mathematical & Physical Sciences, Division of Chemistry, 1055 S, telephone: (703) 292-4970, email: [btissue@nsf.gov](mailto:btissue@nsf.gov)

For questions related to the use of FastLane, contact:

- Paul G. Spyropoulos, Computer Specialist, Directorate for Mathematical & Physical Sciences, Division of Chemistry, 1055 S, telephone: (703) 292-4968, fax: (703) 292-9037, email: [pspyropo@nsf.gov](mailto:pspyropo@nsf.gov)

## IX. OTHER PROGRAMS OF INTEREST

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The NSF *Guide to Programs* is a compilation of funding for research and education in science, mathematics, and engineering. The NSF *Guide to Programs* is available electronically at <http://www.nsf.gov/cgi-bin/getpub?gp>. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter.

Many NSF programs offer announcements or solicitations concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices. Any changes in NSF's fiscal year programs occurring after press time for the *Guide to Programs* will be announced in the NSF *E-Bulletin*, which is updated daily on the NSF Website at <http://www.nsf.gov/home/ebulletin>, and in individual program announcements/solicitations. Subscribers can also sign up for NSF's *Custom News Service* (<http://www.nsf.gov/home/cns/start.htm>) to be notified of new funding opportunities that become available.

Related programs:

- Major Research Instrumentation Program (MRI) <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf04511>
- Course, Curriculum and Laboratory Improvement (CCLI) <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf03598>
- Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs Phase I Programs <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf03535>
- Grant Opportunities for Academic Liaison With Industry (GOALI) <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf98142>
- Biocomplexity in the Environment (BE) <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf03597>
- Instrumentation for Materials Research (IMR) <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf04503>
- Instrument Development for Biological Research <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf98119>
- Earth Sciences Instrumentation and Facilities (EAR/IF) <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf04507>
- Advanced Technologies and Instrumentation (ATI): Special Competition: Astronomical Applications with the Advanced Electro-Optical System of the United States Air Force <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf03543>

Other components of CRIF include:

- CRIF:MU Departmental Multiuser Instrument Acquisition <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf03563>
- CRIF:CRF Chemical Research Facilities - a separate program solicitation will be issued in early 2004.

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Awardees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals from all qualified scientists, engineers and educators. The Foundation strongly encourages women, minorities and persons with disabilities to compete fully in its programs. In accordance with Federal statutes, regulations and NSF policies, no person on grounds of race, color, age, sex, national origin or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF, although some programs may have special requirements that limit eligibility.

*Facilitation Awards for Scientists and Engineers with Disabilities (FASSED)* provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the GPG Chapter II, Section D.2 for instructions regarding preparation of these types of proposals.

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants and cooperative agreements for research and education in the sciences, mathematics, and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Website at <http://www.nsf.gov>

- **Location:** 4201 Wilson Blvd. Arlington, VA 22230
  
- **For General Information** (NSF Information Center): (703) 292-5111
  
- **TDD (for the hearing-impaired):** (703) 292-5090 or (800) 281-8749
  
- **To Order Publications or Forms:**  
  
Send an e-mail to: [pubs@nsf.gov](mailto:pubs@nsf.gov)  
  
or telephone: (703) 292-7827
  
- **To Locate NSF Employees:** (703) 292-5111

## PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

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The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and

researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

An agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Division of Administrative Services, National Science Foundation, Arlington, VA 22230.

OMB control number: 3145-0058.

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